IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method, comprising:

detecting a presence of at least one impulse interference within a multi-carrier signal,

blanking samples where significant amount of the impulse noise caused by the at least one impulse interference is present to obtain a signal with blanking,

determining an estimate of the signal with blanking,

determining carrier correction values, which carrier correction values are based on deviations of certain carrier values compared to prior known information determined using a covariance function, and the blanking, and

~~performing correction of the estimate without Inversion Fast Fourier Transform or feedback circuitry so as to influence~~ influencing the estimate by the carrier correction values to obtain a representation of a desired signal.

2. (Previously Presented) The method according to claim 1, wherein the step of determining the estimate comprises the step of calculating the estimate by a time domain to frequency domain transform of the signal with the blanking and temporarily storing the estimate.

3. (Previously Presented) The method according to claim 1, wherein the step of determining the carrier correction values comprises the steps of

calculating a difference between observed pilot values and known values for pilot carriers,

calculating weight values corresponding to blanking window position, and applied pilot based system,

calculating the carrier correction values based on the difference and the weight values for each carrier, and

calculating the corrected estimate by computing the carrier correction values with the stored estimate.

4. (Previously Presented) The method according to claim 1, further comprising before the step of determining the estimate, the step of shifting sampled signal in such a way that a blanking window is substantially centred at first sample position, and compensating the phase shift for each carrier before forwarding a corrected estimated signal.

5. (Previously Presented) The method according to claim 1, wherein the step of detecting is based on a sliding window calculation.

6. (Previously Presented) The method according to claim 1, wherein the step of detecting is based on monitoring an exceeding of a threshold in amplitude of the signal.

7. (Previously Presented) The method according to claim 1, wherein the step of detecting is based on monitoring amplitude variations.

8. (Previously Presented) The method according to claim 1, wherein the step of blanking comprises blanking a predetermined amount of digital values substantially coincident with the impulse interference.

9. (Previously Presented) The method according to claim 1, wherein the step of blanking comprises a predetermined set of blanking window positions.

10. (Previously Presented) The method according to claim 1, wherein the step of blanking comprises blanking digital values which coincide with the impulse interference.

11. (Previously Presented) The method according to claim 1, wherein the step of blanking is based on an appliance of position and duration of the impulse interference.

12. (Previously Presented) The method according to claim 1, wherein the step of blanking comprises blanking digital values directly affected by the impulse interference and digital value neighbouring the impulse interference.

13. (Previously Presented) The method according to claim 1, wherein a blanking window comprises at least one of a rectangular blanking window, and a blanking window with smooth transitions at end.

14. (Previously Presented) The method according to claim 1, wherein the carrier correction values are calculated for various carriers based on various pilot values.

15. (Previously Presented) The method according to claim 1, wherein the carrier correction values are calculated based on two closest pilots.

16. (Cancelled).

17. (Currently Amended) The method according to claim ~~16~~ 1, wherein location of a blanking window is taken in account in deriving the covariance function.

18. (Currently Amended) The method according to claim ~~16~~ 1, wherein input samples are shifted in such a way that location of blanking window is substantially centred at first sample.

19. (Previously Presented) The method according to claim 1, wherein the certain carrier values comprises observed pilot carrier values of the received signal affected by the impulse interference.

20. (Previously Presented) The method according to claim 1, wherein the prior known information comprises previously received pilot carrier values.

21. (Previously Presented) The method according to claim 20, wherein the previously received pilot carrier values comprise transmitted pilot values multiplied with a channel estimate on pilot frequencies.

22. (Previously Presented) The method according to claim 21, wherein the previously received pilot carrier values are not affected by impulse interference.

23. (Previously Presented) The method according to claim 1, wherein the prior known information comprises interpolated pilot carrier values, wherein the interpolated pilot carrier values are obtained from a set of received OFDM symbols, wherein certain pilot carrier values affected by the impulse interference is interpolated based on pilot carrier values received before and after the certain pilot carrier values.

24. (Previously Presented) The method according to claim 23, wherein the pilot carrier values are multiplied with a channel estimate on respective pilot frequencies.

25. (Currently Amended) ~~A~~ The method according to claim 24, wherein the before and after received pilot carrier values are not affected by impulse interference.

26. (Previously Presented) The method according to claim 3, wherein the pilot carrier values are contained in at least one OFDM symbol of the received signal.

27. (Previously Presented) The method according to claim 1, wherein the multi-carrier signal comprises OFDM signal.

28. (Previously Presented) The method according to claim 27, wherein the OFDM signal is operable in at least one of a DVB system, a terrestrial DVB system and a ISDB-T system.

29. (Currently Amended) A receiver, comprising:

a first circuitry for detecting a presence of at least one impulse interference within a multi-carrier signal,

a second circuitry for blanking samples where significant amount of the impulse noise caused by the at least one impulse interference is present to obtain a signal with blanking, and for determining an estimate of the signal with blanking,

a third circuitry for determining carrier correction values, which carrier correction values are based on deviations of certain carrier values compared to prior known information determined using a covariance function, and the blanking, and

a fourth circuitry for ~~performing correction of the estimate without Inversion Fast Fourier Transform or feedback circuitry so as to influence~~ influencing the estimate by the carrier correction values to obtain a representation of a desired signal.

30. (Previously Presented) The receiver according to claim 29, wherein the multi-carrier signal comprises OFDM signal.

31. (Previously Presented) The receiver according to claim 30, wherein the OFDM signal is operable in at least one of a DVB system, a terrestrial DVB system and an ISDB-T system.

32. (Previously Presented) The receiver according to claim 29, wherein the receiver further comprises means for interaction with a service provider providing the signal.

33. (Previously Presented) The receiver according to claim 32, wherein the means for interaction comprises a cellular mobile module operable under coverage of a cellular mobile network.

34. (Previously Presented) The receiver according to claim 29, wherein the second circuitry for determining the estimate comprises circuitry for performing a time domain to frequency domain transform of the signal with blanking.

35. (Previously Presented) The receiver according to claim 34, wherein the third circuitry for determining the carrier correction values is adapted to:

calculate a difference between observed pilot values and known values for pilot carriers,

calculate weight values corresponding to blanking window position, and applied pilot based system,

calculate the carrier correction values based on the difference and the weight values for each carrier, and

calculate the corrected estimate by computing the carrier correction values with the stored estimate.

36. (Previously Presented) The receiver according to claim 29, further comprising a broadcast multi-carrier signal receiving module.

37. (Previously Presented) The receiver according to claim 29, wherein the receiver comprises a user terminal for obtaining at least one service which is received within the signal.

38. (Currently Amended) A system, comprising:

means for detecting a presence of at least one impulse interference within a multi-carrier signal,

means for blanking samples where significant amount of the impulse noise caused by the at least one impulse interference is present to obtain a signal with blanking,

means for determining an estimate of the signal with blanking,

means for determining carrier correction values, which carrier correction values are based on deviations of certain carrier values compared to prior known information determined using a covariance function, and the blanking, and

means for ~~performing correction of the estimate without Inversion Fast Fourier Transform or feedback circuitry so as to influence~~ influencing the estimate by the carrier correction values to obtain a representation of a desired signal.

39. (Previously Presented) The system according to claim 38, wherein the system comprises at least one of a DVB system, a terrestrial DVB system and an ISDB-T system.

40. (Currently Amended) A computer program product comprising computer executable program code recorded on a computer readable storage medium, the computer executable program code comprising:

code for causing the system to detect a presence of at least one impulse interference within the signal,

code for causing the system to blank samples where significant amount of the impulse noise caused by the at least one impulse interference is present to obtain a signal with blanking,

code for causing the system to determine an estimate of the signal with blanking,

code causing the system to determine carrier correction values, which carrier correction values are based on deviations of certain carrier values compared to prior known information determined using a covariance function, and the blanking, and

code for causing the system to ~~perform correction of the estimate without Inversion Fast Fourier Transform or feedback circuitry so as to~~ influence the estimate by the carrier correction values to obtain a representation of a desired signal.

41. (Currently Amended) A method, comprising:

detecting a presence of at least one impulse burst,

blanking samples which are affected by the at least one impulse burst,

calculating a time domain to frequency domain transform of an OFDM signal with the blanked samples to obtain an estimate,

calculating a difference between observed pilot values and known values for pilot carriers,

calculating weight values coinciding with a blanking window position,

calculating carrier correction values based on the difference and the weight values for each carrier using a covariance function;~~, wherein the carrier correction values are configured to be performed without Inversion Fast Fourier Transform or feedback circuitry;~~ and

subtracting the carrier correction values from the estimate to obtain a representation of a desired signal.

42. (Previously Presented) The method according to claim 41, wherein the weight values are calculated based on the following formulae:

$\underline{w} = \left(\underline{\underline{C}}_p\right)^{-1} \underline{c}_b(k)$, wherein w denotes the weight values, C_p denotes the pilot deviations, and $c_b(k)$ denotes carrier index values.

43. (Previously Presented) The method according to claim 41, wherein the carrier correction values are calculated based on the following formulae:

$b_k = \underline{w}^T \underline{P}$, wherein b_k denotes the carrier correction values, w denotes the weight values, and P denotes pilot deviation values.

44. (Original) The method according to claim 1, wherein performing correction of the estimate without Inversion Fast Fourier Transform or feedback circuitry comprises using at least one of minimum mean square error estimation, autocorrelation estimation or suboptimal approximation in performing the correction.